

**UNIVERSITY OF MAINE AT FARMINGTON**

**COLLEGE OF EDUCATION, HEALTH AND REHABILITATION**

**LESSON PLAN FORMAT**

**Teacher’s Name:** Ms. Jackson **Lesson #:** 2 **Facet:** Empathy and Self-Knowledge  
**Grade Level:** 6-8**Numbers of Days:** 3-4  
**Topic:** Cardiovascular Training  
  
**PART I:**  
  
**Objectives**  
**Student will understand that** there are various cardiovascular training techniques  
**Student will know** heart rate, fitness, conditioning, cardiovascular, exercise, training schedule  
**Student will be able to do** consider and recognize different cardiovascular training techniques  
**Product:** Google Docs and Prezi  
**Maine Learning Results (MLR) or Common Core State Standards (CCSS) or Next Generation Science Standards (NGSS) Alignment**  
**Maine Learning Results**  
**Content Area:** Health Education and Physical Education  
**Standard Label:** H. Physical Fitness Activities and Knowledge  
**Standard:** H3 Fitness Activity  
**Grade Level Span:** Grade 6-8  
Students participate in physical activities that address personal fitness goals for the health-related fitness components  
**Rationale:** Students will be focusing on the knowledge of Health Education and Physical Education based upon cardiovascular training.  
  
**Assessments**  
**Formative (Assessment for Learning)**  
**Section I – checking for understanding strategy during instruction**  
During the lesson, students will be asked to show hand signals (thumbs up, down, or to the side) representing how confident they feel about the material they're learning. This will help the teacher to know what areas of the lesson need to be built upon on if he/she can move on to the next topic. Also, observing students throughout their projects will present to the teacher what the students are understanding.  
**Section II – timely feedback for products (self, peer, teacher)**  
The students will be assessed based on the rubric that is handed out prior to starting the assessments. After presentations, the students will receive a grade on the rubric within the next couple class periods.  
**Summative (Assessment of Learning):**  
•Google Docs: Collaborate as a group on how to present and show different cardiovascular techniques. You may use Weebly as a type of presentation since we have covered how to use this technology already, but if there is another type of presentation (poster, powerpoint, etc.) that you know how to use, you may use that as well. **(20 points)**  
•Prezi: Demonstrate and show how and where students find different types of cardiovascular techniques in everyday life. I want you to be creative and really make this presentation fun and engaging. You will be showing this to the class, so add video, color, and pictures that will interest your classmates. **(20 points)**  
  
**Integration**  
**Technology (SAMR):** This would be modification because on the Prezi website students can add music, photos, and video all in one place as well as explaining the different cardiovascular techniques.  
**English:** The students are writing and talking about the techniques that they are presenting on the website that they create while collaborating on Google Docs.  
  
**Groupings**   
**Section I - Graphic Organizer & Cooperative Learning used during instruction**  
The Describing Wheel is a place for students to write down some words or phrases that they have come up with or heard from other students. Give One, Get One is a cooperative learning activity where each student takes a piece of paper, folds it in half and on one half they have a give one column where they write any answers that they can come up with to a posed question by the teacher. The Get One is on the other half of the paper and each student will get into pairs and share their give one answers. If a student hears something that they didn't already know, they will add it into their Get One column. Once the students complete their list, they raise their hand and find a new partner.  
**Section II – Groups and Roles for Product**  
Students will work in groups to collaborate on finding different cardiovascular techniques to then present on their Prezi.  
  
**Differentiated Instruction**  
**MI Strategies** (6 out of 8 MI)  
**Verbal:** Having conversations and creating a presentation on google docs.  
**Logic:** Students will be comparing different types of cardio training techniques for different types of people.  
**Kinesthestic:** Doing hands-on work during class while creating Prezi presentation.  
**Intrapersonal:** Students can choose to make their Prezi as a group or on their own.  
**Interpersonal:** Collaboration on google docs will give students the opportunity to work together.  
**Naturalist:** Consider different cardiovascular techniques done in nature.  
  
**Modifications/Accommodations**  
***From IEP’s ( Individual Education Plan), 504’s, ELLIDEP (English Language Learning Instructional Delivery Education Plan)*** *I will review student’s IEP, 504 or ELLIDEP and make appropriate modifications and accommodations.*  
  
**Plan for accommodating absent students:**  
Team work can be done individually and modified for the student to get necessary work done. Set up a meeting with the teacher to figure out how to proceed and complete website and app presentation (See statement about absences on the syllabus).  
  
**Extensions**  
**Technology (SAMR):Gifted Students:**  
Sharing their Prezi publicly on a blog or possibly as a page on their website created in lesson 1.  
  
**Materials, Resources and Technology**

* iPads/Laptops
* handouts
* pens, pencils
* notebook paper
* Email

**Source for Lesson Plan and Research**  
<http://www.levy.k12.fl.us/instruction/Instructional_Tools/60FormativeAssessment.pdf> This is a list that explains different ways of checking for understandings.  
<https://edu221resources.wikispaces.com/file/view/cooperative_learning_strategies.pdf/426402320/cooperative_learning_strategies.pdf> Give One, Get One Cooperative Learning Activity  
<http://www.eduplace.com/graphicorganizer/> A link to all different types of graphic organizers.  
<http://www.eduplace.com/graphicorganizer/pdf/wheel_eng.pdf> The handout for the Describing Wheel graphic organizer.  
<https://prezi.com/> A link to the presentation website, Prezi, the students will be using for their product.  
<https://www.google.com/drive/> A link to google drive where students will sign in to create their collaborative google doc.  
<http://www.heart.org/HEARTORG/Conditions/More/MyHeartandStrokeNews/All-About-Heart-Rate-Pulse_UCM_438850_Article.jsp#.VujSSZMrLR0> The link for information on heart rate.  
<https://en.wikipedia.org/wiki/Physical_fitness#Fitness> The link for information on physical fitness.  
<https://www.healthstatus.com/health_blog/wellness/cardio-exercise-definition-and-benefits/> A link for information on cardiovascular training  
  
**PART II:**  
**Teaching and Learning Sequence (Describe the teaching and learning process using all of the information from part I of the lesson plan)** *Take all the components and synthesize into a script of what you are doing as the teacher and what the learners are doing throughout the lesson. Need to use all the WHERETO’s. (1-2 pages)*  
  
Classroom arrangement: Desks will be aligned and students can sit wherever for the start of class. It is important for students to rearrange desks in a way that is conducive to their group work.  
**Agenda**  
Day 1:  
What is cardiovascular training? (10 minutes)  
Why is it important? (10 minutes)  
Give One, Get One (20 minutes)  
Hand Signals (5 minutes)  
Describing Wheel (10 minutes)  
Introduce Google Docs (10 minutes)  
Introduce Prezi (10 minutes)  
Make Groups/Questions (5 minutes)  
Day 2:  
Handout Google Docs/Group work Rubric (10 minutes)  
Get into groups: discuss and research cardiovascular training (30 minutes)  
Begin creating Prezi (40 minutes)  
Day 3:  
Questions (5 minutes)  
Finish Prezis (30 minutes)  
Presentations/Teacher Observations (45 minutes)  
  
**Teaching and Learning Sequence** (Include all hyperlinks of the above URL's in this section.)  
  
Students will understand that there are various cardiovascular training techniques. It is important to know this topic because it can help the students to know what kinds of cardiovascular training is in their range and experience level of exercise. The standard addresses that s*tudents participate in physical activities that address personal fitness goals for the health-related fitness components.* Specific ways to train cardiovascular health can help students know how and when to continue or increase level of exercise. There are so many aspects to staying in shape, and the most common is running. Students can engage themselves in their own learning about why this is important and how it can help them stay fit and healthy throughout their lives.  
**Where, Why , What, Hook, Tailors:** *Verbal, Interpersonal*  
  
Students will know heart rate, fitness, cardiovascular, training schedule. **See content notes.** The [Describing Wheel](http://www.eduplace.com/graphicorganizer/pdf/wheel_eng.pdf) is a place for students to write down some words or phrases that they have come up with or heard from other students. [Give One, Get One](https://edu221resources.wikispaces.com/file/view/cooperative_learning_strategies.pdf/426402320/cooperative_learning_strategies.pdf) is a cooperative learning activity where each student takes a piece of paper, folds it in half and on one half they have a give one column where they write any answers that they can come up with to a posed question by the teacher. The Get One is on the other half of the paper and each student will get into pairs and share their give one answers. If a student hears something that they didn't already know, they will add it into their Get One column. Once the students complete their list, they raise their hand and find a new partner. Throughout the lesson, the teacher will ask clarifying questions where the students will get the opportunity to give [hand signals](http://www.levy.k12.fl.us/instruction/Instructional_Tools/60FormativeAssessment.pdf) representing their understanding of the content. This will allow the teacher to observe and decide what needs to be further explained or what can be moved on from.  
**Equip, Explore, Rethink, Tailors:** *Logic, Kinesthetic, Intrapersonal*  
  
Students will be able to consider and recognize different cardiovascular training techniques and how you will facilitate the learning process and include tutorial for the digital product. Collaborate on [google docs](https://www.google.com/drive/) how to present and show different cardiovascular techniques and demonstrate with [Prezi](https://prezi.com/) how and where they are used.  
Students will be grouped randomly into groups of 2 or 3, if they don't choose to make it on their own. The groups will then have time to decide who will be doing what jobs. As a group, they all must come up with some research regarding the assignment, but once they begin creating the Prezi, they can divide the work into equal parts. When the groups present, it will become clear who did what job and who did more or less work. As well as teacher observation, the students will be given a rubric that specifies in how they are to divide up the work equally.  
**Experience, Revise, Refine, Tailors:** *Verbal, Logic, Kinesthetic, Intrapersonal, Interpersonal, Naturalist*  
  
The students will be giving presentations on the last day of the lesson, during this time, the teacher will be finalizing the students overall grades based on the work she/he has seen them doing in class and then on how they are involved in the final presentations. If there is time in class the teacher can return rubrics to the students at the end of the last day, but if not they will be given the next class. This lesson continues into both lessons 3 and 4 because students will be blogging about healthy lifestyle choices and then describing a meal and fitness plan that they could incorporate what they've learned in this lesson.  
**Evaluate, Tailors:** *Verbal, Visual, Kinesthetic, Interpersonal, Naturalist*  
  
**Teacher Content Notes**   
Students will know…..  
  
[heart rate](http://www.heart.org/HEARTORG/Conditions/More/MyHeartandStrokeNews/All-About-Heart-Rate-Pulse_UCM_438850_Article.jsp#.VujSSZMrLR0): Knowing about your heart rate can help you monitor your fitness level, even if you're not an athlete. It can help anyone notice early developing health problems. Your heart rate, or pulse, is the number of times your heart beats per minute. A normal heart rate varies from person to person, but knowing yours can be an important to knowing when your heart is unhealthy.  
  
[fitness](https://en.wikipedia.org/wiki/Physical_fitness#Fitness): **Physical fitness** is a general state of health, well-being and the ability to act in the desired way, such as for sport. Physical fitness is generally achieved through good nutrition, physical exercise, physical activity, and lots of sleep. Fitness used to be defined by "the capacity to carry out the day’s activities without undue fatigue", however, overtime, changes in lifestyles physical fitness is now considered "a measure of the body's ability to function efficiently and effectively in work and leisure activities, to be healthy, to resist diseases, and to meet emergency situations".  
  
[cardiovascular training](https://www.healthstatus.com/health_blog/wellness/cardio-exercise-definition-and-benefits/): Cardio exercise is defined as any exercise that raises your heart rate. Human bodies were made to move and to keep our muscles in shape they need to be moved. This movement makes the muscles stronger and stronger muscles make for a more efficient and healthy body. The heart is a muscle. Therefore, working it makes it stronger as well. A stronger cardiovascular system means "more capillaries delivering more oxygen to cells in your muscles. This enables your cells to burn more fat during both exercise and inactivity", which in turn helps our bodies stay healthy and fit.  
  
training schedule: A training schedule is based on the individual and what goals they want to achieve in beginning this journey. There are many ways to start a training schedule, like deciding what you're working towards (5k, weight loss, muscle toning, etc.). Once you've decided on that, move to developing a weekly work plan that is conducive to your other schedules, one that you can stick too. Routine is very important when first starting a training schedule. There are many resources online that help individuals to develop their own personalized plan.  
  
**Handouts**  
Describing Wheel  
Rubric for Google Docs/Group Work  
Rubric for Prezi  
  
**Maine Common Core Teaching Standards for Initial Teacher Certification and Rationale**  
  
***Standard 1 – Learner Development. The teacher understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.***  
  
***Learning Styles***  
  
***Clipboard:*** The students will be given clear directions on what needs to be done in all aspects of the lesson. They will be given a rubric so that they may check back to make sure they have each aspect of the assignment completed before presenting.  
***Microscope:*** Students will be able to do research about cardiovascular training. This will give them the ability to examine different definitions and techniques about this topic.  
***Puppy:*** Students will be able to work in groups on their google docs and presentations and working together in a comfortable environment.  
***Beach Ball:*** Students will be able to get creative when working on their presentations by adding color, photos, and videos to really make the website their own.  
  
***Rationale:*** The students will all be given opportunity to work in an environment and do parts of the assignment that best relate to their learning styles.  
  
***Standard 6 -* *Assessment. The teacher understands and uses multiple methods of assessment to engage learners in their on growth, to monitor learner progress, and to guide the teacher's and learner's decision making.***  
  
***Formative:***  
**Section I – checking for understanding strategy during instruction**  
During the lesson, students will be asked to show hand signals (thumbs up, down, or to the side) representing how confident they feel about the material they're learning. This will help the teacher to know what areas of the lesson need to be built upon on if he/she can move on to the next topic. Also, observing students throughout their projects will present to the teacher what the students are understanding.  
**Section II – timely feedback for products (self, peer, teacher)**  
The students will be assessed based on the rubric that is handed out prior to starting the assessments. After presentations, the students will receive a grade on the rubric within the next couple class periods.  
  
***Summative:***  
The students will be working together to research cardiovascular training and then creating a Prezi presentation to show the class what they found.  
  
***Rationale:***   
The students will be given both formative assessment and summative assessment to really ensure student mastery of the topics. The students wont be graded on their formative assessment, but in the end of the lesson will be graded on their group collaboration and final presentation on Prezi.  
  
***Standard 7* - *Planning Instruction. The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.***  
  
***Content Knowledge:*** Cardiovascular Training **See content notes**  
  
***MLR or CCSS or NGSS***  
**Maine Learning Results**  
**Content Area:** Health Education and Physical Education  
**Standard Label:** H. Physical Fitness Activities and Knowledge  
**Standard:** H3 Fitness Activity  
**Grade Level Span:** Grade 6-8  
Students participate in physical activities that address personal fitness goals for the health-related fitness components  
**Facet:** Empathy and Self-Knowledge  
**Rationale:** Students will be focusing on the knowledge of Health Education and Physical Education based upon cardiovascular training.  
  
***Standard 8 -* *Instructional Strategies. The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.***  
  
***MI Strategies:***  
**Verbal:** Having conversations and creating a presentation on google docs.  
**Logic:** Students will be comparing different types of cardio training techniques for different types of people.  
**Kinesthestic:** Doing hands-on work during class while creating Prezi presentation.  
**Intrapersonal:** Students can choose to make their Prezi as a group or on their own.  
**Interpersonal:** Collaboration on google docs will give students the opportunity to work together.  
**Naturalist:** Consider different cardiovascular techniques done in nature.  
  
***SAMR:***  
Sharing their Prezi publicly on a blog or possibly as a page on their website created in lesson 1.  
  
***Rationale:*** Lessons are differentiated for many learning styles and teacher encourages students to develop their own learning in researching cardiovascular training and applying it to their own lives.  
  
  
***NETS STANDARDS FOR TEACHERS***  
**1. Facilitates and Inspire Student Learning and Creativity. Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments.**  
a. Promote, support, and model creative and innovative thinking and inventiveness  
  
b. Engage students in exploring real-world issues and solving authentic problems using digital tools and resources  
  
c. Promote student reflection using collaborative tools to reveal and clarify students’ conceptual understanding and thinking, planning, and creative processes  
  
d. Model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments  
  
***Rationale:*** *a,c,d*  
  
  
**2. Design and Develop Digital Age Learning Experiences and Assessments. Teachers design, develop, and evaluate authentic learning experiences and assessment incorporating contemporary tools and resources to maximize content learning in context and to develop knowledge, skills, and attitudes identified in the NETS-S.**  
a. Design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity  
  
b. Develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress  
  
c. Customize and personalize learning activities to address students’ diverse learning styles, working strategies, and abilities using digital tools and resources  
  
d. Provide students with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching  
  
***Rationale:*** *a,b,c,d*